

IMPACT OF THE NIGERIAN CAPITAL MARKET ON THE OUTPUT OF QUOTED MANUFACTURING FIRMS

Ikeobi, Nneka Rosemary

*Department of Actuarial Science, Faculty of Management Sciences,
University of Jos, Jos.*

Email: nikeobi2002@yahoo.com

Tel No: 08037032354

ABSTRACT

Using a micro-level approach and firm-level data, this paper assesses the role of the Nigerian Capital Market in the provision of funds to the manufacturing sector, by examining the relationships between the mobilization and allocation functions of the capital market and the output of the 24 manufacturing firms included in the study. The results showed that there was a positive but insignificant impact of funds raised on output and a positive and significant impact of funds supplied on output. This implies that the manufacturing firms did not access fresh funds from the capital market, even as the market showed the potential to supply funds to the manufacturing firms during the period under study. The negative but insignificant relationship between the capital market allocation function and output shows the market was generally illiquid and points to the inefficiency of the market to provide the information to effectively allocate funds to the manufacturing firms. The policy implication of these findings is that efforts should be geared at removing all identified impediments to capital market operations to make it more attractive and accessible to entrepreneurs.

Keywords: Nigerian Capital Market, Funding, Manufacturing Firms

1. INTRODUCTION

The financial intermediation role of capital markets involves the mobilization and allocation of capital. Capital mobilization refers to obtaining and pooling of funds from savers or surplus units such as individuals, households and business firms and making these funds available to users or deficit units who are mainly businesses and government. The degree to which the capital market is able to achieve this depends on how efficient the market is, which in turn depends on the level of development of the market. Capital allocation refers to the channeling of the mobilized funds to those areas where the best returns can be realized. The capital market provides the mechanism by which the nation's financial resources are mobilized and allocated to those industries and companies that will make the best use of them.

The importance of capital market development in the growth process of the developed countries of the world has been highlighted in a number of empirical studies. These studies (Atje & Jovanovic, 1993; Levine & Zervos, 1998; Rousseau & Wachtel, 2000; Beck & Levine, 2002) which focused on the finance-growth link show that industries and firms located in economies with well-developed capital markets have grown faster than those located in economies with weak capital markets.

The Nigerian capital market came into formal existence through the establishment of the Nigerian Stock Exchange in 1961 primarily to provide the machinery for mobilizing private and public savings and making them available for productive investment through stocks and

shares (Onyido, 1994). Although the Nigerian capital market has witnessed growth over the years in terms of market capitalization, the same cannot be said in terms of growth in the number of securities from quoted manufacturing companies. As at 2007 less than 1% of the registered companies in Nigeria were quoted on the Nigerian Stock Exchange, with only 214 equities listed. In 2016 the number of listed companies and listed equities stood at 184 and 190 respectively. The inability of the Nigerian capital market to adequately mobilize capital and channel it efficiently to the productive sectors has great implications for the manufacturing sector which is supposed to be the engine of growth of an economy.

A number of indices such as index of manufacturing production, manufacturing export, capacity utilization and share in GDP which have been used to assess manufacturing performance have continued to show a downward trend. The share of manufacturing value-added in the Gross Domestic Product in Nigeria was only 3.2% in 1960. Manufacturing rose at an annual average rate of 15.6% between 1974 and 1977, while its share of GDP increased from 5.4% in 1977 to 13% in 1982. After this time, manufacturing activities dropped sharply as a result of a fall in foreign exchange inflow which weakened the ability of manufacturers to import needed inputs. As a result of this development, manufacturing output fell by an average of about 3% between 1981 and 1986 and the share of manufacturing in GDP was 6.2% in 1998. While agriculture accounted for almost half of the GDP growth rate of 6.4% in 2008, contributing about 2.8%, industry (manufacturing inclusive) as a group, however, made a negative contribution of 0.5% (Central Bank of Nigeria, 2008). By 2015, industrial sector output fell by 1.3% due to decreased activities in the manufacturing sub-sector (Central Bank of Nigeria, 2015).

The underdevelopment and continuous decline of the manufacturing sector in Nigeria has denied the economy of productive employment and made it import-dependent despite the abundance of human and natural resources in the country. Based on the foregoing if the manufacturing sector is to play its role in the growth and development of the economy, more needs to be done to improve its share to GDP.

That most Nigerian manufacturing firms lack adequate long-term finance is not in doubt as Onuoha (2013) identified inadequate finance as one of the major problems of the manufacturing sector. Since the growth process of the Nigerian economy depends to a large extent on the development of the manufacturing sector because of its potential to not only provide goods but also employment to its citizens, its financing deserves more than a cursory attention. The Nigerian capital market which was established to be a source of long-term funding for the productive sector can therefore be assessed in terms of how it has impacted the manufacturing sector.

Although a large volume of literature exists on the role of capital markets, majority of these studies have been conducted at the macroeconomic level using aggregate macroeconomic data. A few studies have started to focus attention using firm-level data at the firm level. There is a dearth of studies which address the impact of the capital market on the performance of manufacturing firms using firm-level proxies to address fund supply and actual funds accessed by firms and this study fills this gap. This study examines the impact of the Nigerian capital market on the output of quoted manufacturing firms using firm-level data. The question is to what extent has the Nigerian capital market been able to impact the manufacturing sector? The specific objectives are to determine the impact of the mobilization and allocation functions of

the Nigerian capital market on the output of quoted manufacturing firms. The findings would be beneficial for capital market development policy in Nigeria.

2. REVIEW OF RELATED LITERATURE

2.1 Theoretical Literature

The primary functions of financial institutions are to aggregate savings of investors and allocate these funds to investment projects. The aggregation of savings is necessary since many investments require funds that cannot be provided by any single investor. Financial intermediaries mediate between the providers and users of funds, by pooling the savings of many investors and by so doing enable the undertaking of large-scale projects.

Financial intermediation theory was first formalized in the works of Goldsmith (1969), McKinnon (1973) and Shaw (1973) who see financial markets as playing a crucial role in economic development, attributing the differences in economic growth across countries to the quantity and quality of services provided by financial institutions. This contrasts with Robinson (1952) who argued that the general tendency is for the supply of finance to move with the demand for it. That is, where enterprise leads, finance follows. He further explained that when a strong impulse to invest is hampered by lack of finance, devices are invented to release it, and then institutions are developed.

The Robinson view is that as the economy grows, the financial sector will naturally expand. In other words economic growth will lead to the expansion of the financial sector. In line with the Robinson school of thought, Goldsmith (1969) attributed the positive correlation between financial development and the level of real per capita Gross National Product (GNP) to not only the positive effect that financial development has on encouraging more efficient use of the capital stock, but to the feedback effects that growth has on financial markets by creating incentives for further financial development.

Financial intermediation does not have a benchmark quantitative framework in the way asset pricing does. Rather the goal of financial intermediation theory is to explain why financial intermediaries exist. To understand the role played by financial intermediaries in the financial sector various theories of financial intermediation have been propounded by various authors and have built on the models of resource allocation based on perfect and complete markets. According to these theories, it is frictions such as asymmetric information and transaction costs that are important in understanding intermediation. Thus financial intermediation theory builds on the notion that intermediaries serve to reduce informational asymmetries and transaction costs (Andries, 2009).

The informational asymmetry approach of financial intermediation theory suggests that financial intermediaries can improve the efficiency of capital allocation due to their capacity to effectively acquire and process information about the innovative activities of the entrepreneurs. This role of asymmetric information as a *raison d'être* of intermediaries has been stressed by Leland and Pyle (1977) who show that an intermediary can communicate information to investors (savers) about potential borrowers (users) at a lower cost than can individual investors. This monitoring is carried out in the capital market by the rendering of periodic financial reports by firms to the stock exchange. Financial intermediaries can obtain information at a lower cost

than individual investors because financial intermediation avoids duplication of the production of information. There are increasing returns to scale to financial intermediation and this information can be re-used over time.

2.2 Empirical Literature

One of the major differences between the developed countries and the less developed ones is the attainment of a higher level of financial system development in developed countries. Empirical studies have shown that most developed countries have well-developed financial systems and that their capital markets have been able to mobilize domestic savings and allocate them efficiently to the real sector. Levine and Zervos (1998) examined the link between capital market development and economic growth. They employed data from 47 countries from 1976 to 1993. They used stock market liquidity (measured as turnover of shares and value traded), size (market capitalization), volatility (twelve months rolling standard deviation), integration with world markets and bank credit for private sector (bank credit to the private sector to GDP) as predictors of economic growth, capital accumulation, improvement in productivity, and savings growth rates. They found that stock market liquidity is strongly correlated to the rate of economic growth but that capital market size, volatility and international integration are not robustly linked with growth.

Arestis, Demetriades and Luintel (2001) analyzed data for Germany, the United States, Japan, France, and the United Kingdom covering a period of 25 years. Similarly, Vazakidis and Adamopoulos (2009) analyzed data for France for the period 1965 to 2007. These results indicated that these countries have been able to mobilize capital effectively for the development of their economies.

In some less developed countries, capital markets have been shown to mobilize domestic savings and allocate funds efficiently. Shabaz, Ahmed and Ali (2008), using time series data from 1971 to 2006, showed that Pakistan has been able to mobilize capital for real sector investment. Similarly, Mishra, Mishra, Mishra and Mishra (2010) examined the impact of capital market efficiency on the economic growth of India using time series data on market capitalization, total market turnover and stock price index over the period spanning from the first quarter of 1991 to the first quarter of 2010. Their study revealed that there is a linkage between capital market efficiency and economic growth in India.

A number of studies have also been carried out in Africa. Agarwal (2001) using simple correlation analysis on 9 African countries from 1992 to 1997 found that capital market development is correlated with investment and in turn with economic growth. Adjasi and Biekpe (2006) from their study of 14 African countries found that positive influence of stock market development on economic growth is significant for countries classified as upper middle-income economies. Yartey and Adjasi (2007) examined the economic importance of capital markets in Africa and they found out that capital markets have contributed to the financing of large corporations in certain African countries, specifically, South Africa, Ghana, Zimbabwe and Mauritius. They used 3 capital market indicators- market capitalization relative to GDP, value of shares traded relative to GDP, and the turnover ratio (value traded/ market capitalization). The analysis failed to show conclusive evidence on the impact of capital markets on growth, even though market value traded seemed to be positively and significantly associated with growth.

A number of scholars in Nigeria have undertaken empirical studies and have also recorded positive relationship. These include Nwokoma (2006), Nwaogwugwu (2008) and Akinlo (2008). Whereas Nwokoma and Nwaogwugwu revealed that there is a strong feedback relationship between capital market variables and industrial output and economic growth in Nigeria, Akinlo found unidirectional causality running from GDP (economic growth) to capital market capitalization. The difference in results may be due to the different methods and time periods used. For example Akinlo worked with data covering 1980 to 2006, while Nwaogwugwu covered the period 1989-2007. The difference notwithstanding, they all stressed on the need for a deliberate effort at boosting economic activities as this will have a positive effect on the development of the capital market.

Later studies in Nigeria such as Okpara (2010) and Okafor and Arowoshegbe (2011) found that the capital market has a positive but insignificant impact on real sector growth.. They noted however that the capital market has great potential to impact the economy more than it has done. Kwoke and Buzugbe (2015), using macro-economic data reported that the Nigerian capital market has not impacted the manufacturing sector significantly. These conflicting conclusions may be as result of the differing time periods in which the studies were carried out.

More recently, Offum and Ihuoma (2018) examined the causal relationship between the capital market and the performance of the industrial sector in Nigeria from 1985 to 2015. The study revealed a long-term relationship between capital market and the development of manufacturing firms in Nigeria, but the growth in capital market activities did not impact significantly on the manufacturing sector during the period under review. Owui (2019) examined the impact of capital market indicators (industrial loan, equity, market capitalization) on industrial sector financing in Nigeria. Using multiple regression statistical technique, they found a significant impact of market capitalization on the growth of the industrial sector. He found however that equity had negative impact on the growth of the industrial sector in Nigeria. Ubesie and Ude (2019) examined the responsiveness of capital market on productivity (output) of manufacturing firms in Nigeria from 1990 to 2016. The study examined the impact of Market capitalization (MCAP), Total listed equities (TLE) and All Share Index (ASI) on the output of manufacturing firms in Nigeria. They employed the Autoregressive Distributed Lag (ARDL) bound test approach and found that capital market indices of the Nigerian Stock Exchange have mixed effect on the productivity (output) of manufacturing firms in Nigeria. The findings revealed that market capitalization interacts positively and significantly with output of manufacturing firms while listed equities and All Share Index have negative influence on the output of the firms.

Two studies using firm-level accounting data have shown that the Nigerian capital market has not impacted the manufacturing sector meaningfully. Oke (2013) examined the impact of capital market on private sector financing and performance in Nigeria from 2002 to 2011 using three quoted companies, two of them from the manufacturing sector. He used profit after tax (PAT) as proxy for firm performance as dependent variable and equities, debt and retained earnings of the firms as independent variables to proxy for capital market funding. He estimated relationships using panel model regression analysis and ordinary least squares technique and found that capital market positively impacts the manufacturing firms selected for the study through equities and retained earnings. Similarly, Ikeobi, Msheliza and Bulus (2016), using firm-level data examined the financial intermediation role of the Nigerian capital market and

the performance of quoted manufacturing firms and found that although the Nigerian capital market showed the potential to mobilize funds for the manufacturing firms, the firms have not made adequate use of the capital market as their source of finance.

Much of the empirical literature on capital markets focused mainly on establishing links with economic growth and use aggregate values of macroeconomic variables. Apart from Oke (2013) and Ikeobi et al. (2016) who used firm-level variables to assess the impact of the Nigerian capital market on two manufacturing firms, there were no other studies to assess the impact of the market on the manufacturing sector using firm-level data. Thus this study tries to address this gap by employing firm-level data to examine the impact of the Nigerian capital market on the output of quoted manufacturing firms.

3. METHODOLOGY

3.1 Data

In order to examine the impact of the Nigerian capital market on the output of quoted manufacturing firms, 24 manufacturing firms from several industrial sectors and with consistent results were selected for the study covering a 12-year period from 2003-2014. The firms were from industrial sectors which included agriculture/agro-allied, breweries, building materials, food/ beverages and tobacco among others.

Secondary data used for the analysis were obtained from annual reports and financial statements of the selected manufacturing firms in the Nigerian Stock Exchange Factbook for the relevant years. Capital market data were obtained from annual reports of Central Bank of Nigeria. The secondary data included accounting data on the quoted manufacturing firms, namely, sales, share capital and market capitalization and data relating to capital market efficiency, that is market turnover ratio. The study employed a multiple regression model using panel data and analyzed with the ordinary least squares technique. Data were put in panel form because they were both cross-sectional and times series in nature. Panel data estimation technique provides more variability and less co-linearity among variables and takes care of the problem of heterogeneity among variables (Gujarati and Sangeetha, 2007).

3.2 Model specification

The model adopted for this study is based on the models of Levine and Zervos (1998) and Hussain (2011) and modified to achieve the objectives of this study. Thus, firms' output which is a measure of performance is expressed as a function of capital market intermediation. In principle, we expect a positive relationship between firms' output and the various proxies of capital market intermediation if indeed the capital market has been channeling funds to the manufacturing firms.

The study employed Sales as the dependent variable and measure of firm output. Sales have been used by several studies to proxy for firm output because it is an important accounting-based and widely used and accepted measure of firm performance. The general form of our firm's output model is as follows:

$$\text{Output} = F(\text{Capital market intermediation}) \dots (1)$$

The general model for this study using panel data analysis is in the following form:

$$\text{Output} = \beta_0 + \beta_1 X_{it} + \beta_2 Z_t + \varepsilon_{it} \dots (2)$$

Where Output indicates firm performance and subscript i specifies cross section dimension (firms) and t specifies time dimensions of the data set. β_0, β_1 , and β_2 are unknown constants. X_{it} represents the set of firm-specific explanatory variables which vary across firms as well as over time. Z_t is institutional (capital market) explanatory variable that varies over time only, which in this study is the allocation efficiency and also information efficiency of the capital market. ε_{it} is the composite error term comprising of firm-specific component, time-specific component and a component varying over time and across firms.

Specifically, when the above model is adopted, equation (2) can be written as

$$\text{Sales}_{it} = \beta_0 + \beta_1 \text{SCAP}_{it} + \beta_2 \text{MCAP}_{it} + \beta_3 \text{TOR}_t + \varepsilon_{it} \dots (3)$$

Where:

Sales_{it} = Sales revenue of firm i in period t . It is proxy for firm output

SCAP_{it} = Share capital of firm i in period t . It is proxy for capital raised at firm level

MCAP_{it} = Market capitalization of firm i in period t . It is a proxy for supply of funds to firms.

TOR_t = Turnover ratio in period t . It is a proxy for capital market efficiency in terms of information provision and allocation efficiency.

ε_{it} = Composite error term

β_0 = Constant term (intercept)

$\beta_1, \beta_2, \beta_3$, and are the coefficients to be estimated.

$i = 1, 2, \dots, 24$

$t = 1, 2, \dots, 12$

The model is further transformed to a log model as follows:

$$\text{LNSales}_{it} = \beta_0 + \beta_1 \text{LNSCAP}_{it} + \beta_2 \text{LNMCAP}_{it} + \beta_3 \text{LNTOR}_t + \varepsilon_{it} \dots (4)$$

From theoretical expositions and conventions, each model parameter estimate is expected to have a positive sign. Thus, a priori expectations from the model were as follows:

β_1, β_2 , and $\beta_3 > 0$. The model specified was estimated using the statistical software SPSS. The model was used to test the following hypotheses at the 5% level of significance;

Hypothesis 1: There is no significant impact of funds raised from the Nigerian capital market on the output of the quoted manufacturing firms.

Hypothesis 2: There is no significant relationship between the funds supplied by the Nigerian capital market to the quoted manufacturing firms and their output.

Hypothesis 3: There is no significant relationship between the capital market allocation function and firm output.

4. Results and Discussions

The result of the panel regression is presented in Appendix 2 and summarized in Table 1.

Table 1: Summary of Regression Result

	Expected Sign	Actual Sign	Pooled Coefficient	P-value
SCAP	+	+	0.139	.166
MKTCAP	+	+	0.453	.000**
TOR	+	-	-0.292	.182
Constant			3.296	.000

Dependent Variable: SALES. Note: ** show significance at 5%

Source: SPSS 21.0 output

Based on the regression result, the relationship between firm performance (SALES) and the explanatory variables can be determined by the equation:

$$\text{Sales}_{it} = 3.296 + 0.139\text{SCAP}_{it} + 0.453\text{MCAP}_{it} - 0.292\text{TOR}_{it}$$

The p-value (0.000) of the F statistic for the model is significant. This shows that the regression model is valid and the data fitted the model well. The coefficient of determination, R^2 is .325. This means that 32.50% change (variance) in the dependent variable can be explained by the independent variables in the model. Thus other factors not included in the model accounted for the remaining variance in the output of the firms.

For hypothesis 1 at 5% significance level, the coefficient for share capital (SCAP) is positive but insignificant (p-value more than 0.05). Thus, we fail to reject the hypothesis that the Nigerian capital market has not significantly impacted the manufacturing firms. The positive but insignificant relationship between share capital which is the proxy for funds raised and firms' output indicates that the quoted manufacturing firms did not source for funds from the Nigerian capital market through its primary market during the period under study. Using a micro-level approach with firm-level data, the results from the first hypothesis agree with those of Okafor and Arowoshegbe (2011), who using industrial level data, found that gross capital formation in Nigeria is not financed significantly by the capital market. It also agrees with Kwoke and Buzugbe (2015), Ikeobi et al. (2016) and Offum and Ihuoma (2018) who also found that the Nigerian capital market has not contributed meaningfully to the Nigerian economy.

In the second hypothesis the relationship between market capitalization (MCAP) and output is positive and significant (p-value less than 0.05). We reject the null hypothesis that there is no significant relationship between the funds supply and firms' output and accept the alternative that there is a significant relationship between funds supply to the manufacturing firms and their output. This shows the potential of the capital market to mobilize and channel funds to the manufacturing firms as it indicates the willingness of investors to supply funds to the firms. However, the result from the first hypothesis shows that the firms did not access funds available in the Nigerian capital market. Again, although this study was carried out with firm-level indicators, the results agree with those of Nwokoma (2006), Akinlo (2008) and Owui (2019) who found positive relationship between the Nigerian Capital Market and industrial output.

These findings from the first two hypotheses using firm-level data have shown that although the Nigerian capital market has the potential to mobilize funds from the economy, it has not translated into fresh capital for manufacturing firms. The Nigerian capital market has demonstrated that it has the potential to mobilize and channel fresh funds to the manufacturing sector, even though the firms have not made use of the opportunities available in the capital market.

In the third hypothesis the coefficient for turnover ratio (TOR) which is proxy for both allocation and information efficiency is negative but insignificant (p-value is more than 0.05). Therefore we fail to reject the null hypothesis. We accept the hypothesis that there is no significant relationship between capital market allocation efficiency and manufacturing firm performance. This indicates that the Nigerian capital market has not been efficient in the allocation of funds to the manufacturing firms and also indicates the lack of liquidity in the market which signals inefficient information provision. This result agrees with the findings of Olowe (1996), Nneji (2013) and Ubesie and Ude (2019) who attribute the low efficiency to the low level of development of the Nigerian capital market.

5. CONCLUSION /RECOMMENDATIONS

The findings of this research work using firm-level data has provided empirical evidence that although the Nigerian capital market demonstrated the potential to mobilize funds for the manufacturing sector; this did not translate into capital formation as firms did not make use of the market to source for funds during the period under study. We can safely conclude that the Nigerian capital market has not impacted positively on the ailing economy by providing the much needed funds to the manufacturing sector which has the greatest potential to impact the economic development of a nation. The low level of development as indicated by the low level of liquidity in the market appears to be responsible for this state of affairs.

Based on the findings of the study, the following recommendations have been made towards improving the role of the Nigerian capital market in the provision of funds to the manufacturing sector:

1. There is need to remove all impediments that may be preventing manufacturing firms from accessing funds from the capital market in order to encourage manufacturing firms to source for funds from the capital market. There is therefore the need to critically look into the activities and operations of the capital market to identify any restrictions or constraints hindering entrepreneurs and firms from accessing funds from the capital market. To this end the listing requirements of the Nigerian Stock Exchange (NSE) should be revisited with a view to relaxing the stringent areas so as to enable indigenous manufacturing companies to source for long term funds from the capital market.
2. To take advantage of the untapped potential for sourcing funds for investment from the Nigerian capital market, there is urgent need to attract new listings and new investors in the market. The Securities and Exchange Commission (SEC) and NSE should as a matter of urgency, embark on more aggressive campaigns through seminars and workshops to create more awareness on the opportunities available to existing and potential entrepreneurs in the manufacturing sector.
3. To improve on the low level of development in the Nigerian capital market as indicated by the low level of liquidity and information efficiency, there is need to improve on

information technology and provision by the operators and regulators. SEC AND NSE as capital market regulators should ensure greater transparency and corporate governance in quoted firms by being more vigilant in their supervisory and monitoring roles by compelling quoted firms to submit their periodic financial results on a timely basis so that investors are better able to make more informed decisions.

REFERENCES

- Adjasi, C. K. D., & Biekpe, N. B. (2006). Stock market development and economic growth: The Case of selected African countries. *African Development Review*, 18 (1), 144-161.
- Agarwal, S. (2001). Stock market development and economic growth: Preliminary evidence from African countries. Retrieved from www.jsd.africa.com
- Andries, A. M. (2009). Theories regarding financial intermediation and financial Intermediaries – A survey. *The Anals of the Stefan cel Mare University of Suceava Fascicle of the Faculty of Economics and Public Administration*. 9 (2), 10, 254-261.
- Akinlo, A. E. (2008). Stock market development and economic growth in Nigeria: Co-integration and co-feature analysis. *Nigerian Journal of Securities and Finance*, 13 (1), 71-90.
- Arestis, P., Demetriades, P., & Luintel, K. (2001). Financial development and economic growth: The role of stockmarkets. *Journal of Money, Credit and Banking*, 33(1), 16-41.
- Atje, R., & Jovanovic, B. (1993). Stock markets and development. *European Economic Review*, 37, 632-640.
- Beck, T. & Levine, R. (2002). Stock markets, banks and growth: Panel evidence. *NBER Working Paper 9082*, Cambridge, 1-23.
- Central Bank of Nigeria (2008). *Annual Report and Financial Statements*. Abuja, Author.
- Central Bank of Nigeria (2015). *Annual Report and Financial Statements*. Abuja, Author.
- Goldsmith, R. W. (1969). *Financial Structure and Development*. New Haven: Yale University Press.
- Gujarati, D. N., & Sangeetha (2007). *Basic Econometrics* (4thed.). New Delhi, Tata McGraw-Hill.
- Hussain, I. (2011). Financial development and firm's growth in textile industry of Pakistan: A Panel data analysis. *Business Review*. 6(2), 97-105.
- Ikeobi, N. R., Msheliza, S. K., & Bulus, H. (2016). Financial intermediation role of the Nigerian Capital market and performance of manufacturing firms. *Research Journal of Finance and Accounting*, 7(22), 89-98.
- Kwode, I. E., & Buzugbe, N. P. (2015). Capital market and the performance of the Manufacturing industries in Nigeria 1970-2012. *European Journal of Business and Management*, 7(13), 11-22.

- Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure and Financial intermediation. *The Journal of Finance*, 32(2), 371-387.
- Levine, R., & Zervos, S. (1998). Stock markets and economic growth. *American Economic Review*, 88, 537-558.
- McKinnon, R. (1973). *Money and Capital in Economic Development*. Washington, D C. Brookings Institute.
- Mishra, P. K., Mishra, U. S., Mishra, B. R., & Mishra, P. (2010). Capital market efficiency and Economic growth: The case of India. *European Journal of Economics, Finance and Administrative Sciences*. 27, 130-138.
- Nigerian Stock Exchange (2016). *Factbook*. Lagos, Author.
- Nneji, I. (2013). Efficiency of the Nigerian capital market: An empirical analysis. *Research Journal of Finance and Accounting*, 4(4), 69-77.
- Nwaogwugwu, I. C. (2008). Stock market development and economic growth in Nigeria: The Causal linkage. *Nigerian Journal of Securities and Finance*, 13(1), 115-128.
- Nwokoma, N. I. (2006). Output growth and stock market development nexus in Nigeria: An Empirical analysis. *The Nigerian Journal of Economic and Social Studies*, 48(1), 83-102.
- Offum, P. F., & Ihuoma, C. E. (2018). Capital market and industrial performance nexus: Empirical Evidence from Nigeria. *The Nigerian Journal of Economics and Social Studies*, 60(3), 116.
- Okafor, C. & Arowoshegbe, A. O. (2011). Stimulating economic development through the Capital market: The Nigerian experience. *JORIND*, 9(2), 404-412.
- Oke, M. O. (2013). Capital market, private sector financing and performance in Nigeria: A case of selected companies. *International Journal of Innovative Research and Development*, 2(5), 1896-1907.
- Okpara, G. C. (2010). Analysis of capital market performance and the growth of the Nigerian Economy: A co-integration approach. *Global Journal of Human Social Science*, 10(4), 9-15.
- Oluwatosin, E. O., Adekanye, T., & Yusuf, S. A. (2013). Empirical analysis of the impact of Capital market efficiency on economic growth and development in Nigeria *International Journal of Academic Research in Economics and Management Sciences*. 2 (6), 44-53.
- Onuoha, B. C. (2013). Factors militating against the global competitiveness of manufacturing Firms in Nigeria. *American International Journal of Contemporary Research*, 3(4), 54-63.
- Owui, H. (2019). Capital market and its performance on industrial sector financing in Nigeria. *IIARD International Journal of Banking and Finance Research*, 5(1), 33-43.

- Robinson, J. (1952). *The Generalization of the General Theory and other Essays*. New York: St. Martin's Press.
- Rousseau, P., & Wachtel, P. (2000). Equity markets and growth: Cross-country evidence on Timing and outcomes, 1980-1995. *Journal of Business and Finance*, 24, 1933-1957.
- Shahbaz, M., Ahmed, N., & Ali, L. (2008). Stock market development and economic growth: Ardl causality in Pakistan. <http://www.eurojournals.com/finance.htm>
- Shaw, E. (1973). *Financial Deepening in Economic Development*. New York. Oxford University Press.
- Ubesie, M. C., & Ude, M. E. (2019). Responsiveness of capital market on the output of manufacturing firms in Nigeria. *International Finance and Banking*, 6(1), 17-30.
- Vazakidis, A., & Adamopoulos, A. (2009). Stock market development and economic growth. *American Journal of Applied Sciences*, 6(11), 1933-1941.
- Yartey, C. A., & Adjasi, C. K. (2007). Stock market development in sub-Saharan Africa: Critical Issues and challenges. *IMF Working Paper WP/07/209*.

APPENDIX 1

Manufacturing Firms used in the Study

S/No	Company
1	Okomu Oil Plc
2	Presco Oil Plc
3	Guinness Nigeria Plc
4	Nigerian Breweries Plc
5	Ashaka Cement Plc
6	Chemical and Allied Products Plc
7	PZ Cussons Nigeria Plc
8	Flour Mills of Nigeria Plc
9	Nestle Nigeria Plc
10	Nigeria Enamelware Plc
11	Vitafoam Nigeria Plc
12	Avon Crowncaps
13	Beta Glass
14	7-UP Bottling Company Plc
15	AG Leventis (Nigeria) Plc
16	GlaxoSmithkline Nigeria Plc
17	UAC of Nigeria Plc
18	B.O.C. Gases plc
19	Chellarams Plc
20	Berger Paints Plc
21	May and Baker Nigeria Plc
22	Northern Nigeria Flour Mills Plc
23	Unilever Nigeria Plc
24	Cement Company of Northern Nigeria Plc

Source: Nigerian Stock Exchange Facebook (2016)

APPENDIX 2

REGRESSION RESULT

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.570 ^a	.325	.318	.62874

a. Predictors: (Constant), TURNOVER RATIO, MKT CAP , SHARE CAPITAL

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.124	3	18.041	45.638	.000 ^b
	Residual	112.269	284	.395		
	Total	166.393	287			

a. Dependent Variable: SALES

b. Predictors: (Constant), TURNOVER RATIO, MKT CAP , SHARE CAPITAL

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.296	.476		6.923	.000
	SHARE CAPITAL	.139	.100	.092	1.389	.166
	MKT CAP	.453	.060	.499	7.560	.000
	TURNOVER RATIO	-.292	.219	-.065	-1.337	.182

a. Dependent Variable: SALES

Source: SPSS 21.0 OUTPUT